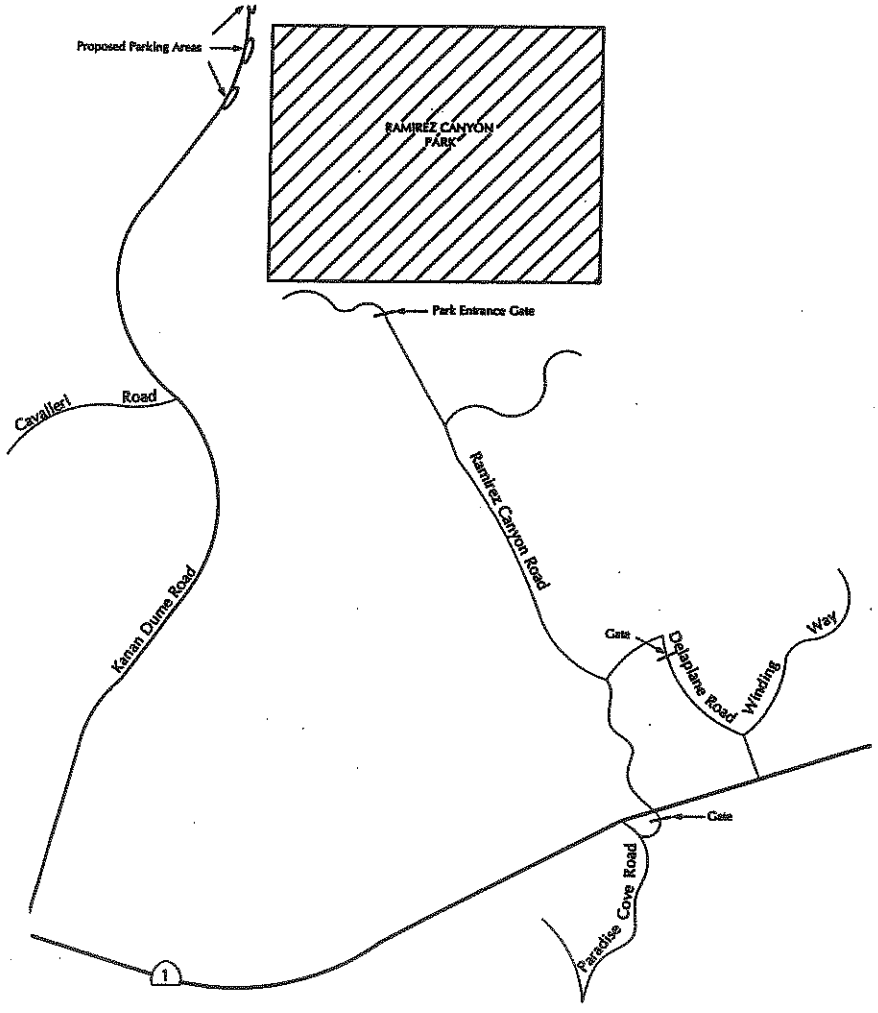
SANTA MONICA MOUNTAINS CONSERVANCY AND MOUNTAINS RECREATION AND CONSERVATION AUTHORITY PARKS PROJECT CITY OF MALIBU, CALIFORNIA

TRAFFIC AND PARKING STUDY



August 21, 2007 **ATE Project #06121**

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TRAFFIC AND PARKING STUDY FOR THE SANTA MONICA MOUNTAINS CONSERVANCY AND MOUNTAINS RECREATION AND CONSERVATION AUTHORITY PARKS PROJECT - CITY OF MALIBU, CALIFORNIA

Associated Transportation Engineers (ATE) has prepared the following traffic and parking analysis for the Santa Monica Mountains Conservancy and Mountains Recreation and Conservation Authority (SMMC/MRCA) Parks Projects, located within and adjacent to the City of Malibu.

We appreciate the opportunity to assist you with this project.

Associated Transportation Engineers

Scott A. Schell, AICP
Principal Planner

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INTRODUCTION

The following study contains an analysis of the potential traffic and parking impacts associated with the Santa Monica Mountains Conservancy and Mountains Recreation and Conservation Authority (SMMC/MRCA) Parks Project, located within and adjacent to the City of Malibu. The study focuses on the improvements proposed for the following three parks: Charmlee Park, Corral Canyon Park, and Ramirez Canyon Park. Improvements have also been proposed at the Escondido Canyon Park, located within the City of Malibu. These improvements have been addressed separately in the Traffic and Parking Analysis prepared by Crain & Associates (November 20, 2006).

PROJECT DESCRIPTION

Charmlee Park

Charmlee Park is located off Encinal Canyon Road, in the City of Malibu. The park currently includes picnic areas, as well as 8 miles of hiking trails and a nature center. The project proposes to develop seven hike-in campsites and one ADA campsite within Charmlee Park. The existing parking supply provided at Charmlee Park is 28 regular parking spaces and two ADA spaces, for a total of 30 parking spaces. The project proposes to increase the parking supply by five spaces, for a total of 35 parking spaces.

Corral Canyon Park

Corral Canyon Park is bounded by Corral Canyon Road to the west and Pacific Coast Highway to the south. The park provides picnic areas, as well as a 2.5 mile loop trail for hikers. The project proposes 14 new hike-in campsites and two new ADA campsites. Corral Canyon Park currently provides 13 parking spaces, one ADA spaces, and one trailer parking space, for a total of 15 parking spaces.

Ramirez Canyon Park

Ramirez Canyon Park is located off Ramirez Canyon Road, in the City of Malibu. The park serves as the home for the Santa Monica Mountains Conservancy administrative offices and the on-site Park Ranger/maintenance supervisor residence. Public gardens, meeting facilities, a public access trail, and a picnic area are located within this park. The project proposes to develop three new hike-in campsites and two new ADA campsites. Access to Ramirez Canyon Park is provided through a gated entrance at the terminus of Ramirez Canyon Road. Vehicular access to Ramirez Canyon Park will continue to be monitored to ensure that the total number of trips to and from the site do not exceed 80 daily trips. Additional hike-in access will be provided from three new parking areas proposed along Kanan Dume Road. The park currently provides 56 existing parking spaces plus 4 van accessible spaces. 35 new parking spaces will be provided in the three proposed parking areas along Kanan Dume Road, for a total of 95 parking spaces.

CHARMLEE PARK - PARKING ANALYSIS

Existing Parking Supply

There are 28 regular parking spaces provided at Charmlee Park and two ADA spaces, for a total of 30 parking spaces. Table 1 shows the number and type of parking spaces provided at the park.

Table 1
Charmlee Park Existing Parking Supply

Parking Spaces	Total
Regular	28
ADA	2
Total	**30**

Parking Surveys - Non-Summer

Parking surveys were conducted by ATE at the site from 10:00 A.M. through 5:00 P.M. on Friday, April 6, 2007 and Saturday, April 14, 2007. The number of vehicles parked in the lot were recorded on an hourly basis to determine the current parking demands. Worksheets showing the results of the parking surveys are attached. Table 2 summarizes the peak parking demands observed at the site.

Table 2
Charmlee Park Existing Peak Parking Demand - Non-Summer

Date	Peak Time	Available Spaces	Occupied Spaces	% Occupied
Friday 4/6/07	11:00 A.M.	30	2	7%
Saturday 4/14/07	12:00 P.M.	30	19	63%

The data presented in Table 2 shows that the highest weekday parking demand occurred at 11:00 A.M. when the demand was 2 spaces (7% occupied). The peak parking demand during the weekend was at 12:00 P.M. when it was 63% occupied (19 occupied spaces).

Parking Surveys - Summer

Parking surveys were conducted by ATE at the site from 10:00 A.M. through 3:00 P.M. on Saturday, July 28, 2007. Table 3 summarizes the peak parking demands observed at the site.

Table 3
Charmlee Park Existing Peak Parking Demand - Summer

Date	Peak Time	Available Spaces	Occupied Spaces	% Occupied
Saturday 7/28/07	12:00 P.M.	30	2	7%

The data presented in Table 3 shows that the peak parking demand during a summer weekend day was at 12:00 P.M. when it was 7% occupied (2 occupied spaces).

Future Parking Supply

The project proposes to increase the parking supply by five spaces, for a total of 35 parking spaces.

Future Parking Demands

Future parking demands were developed based on the following assumption:

Campsite Use - Parking demands for the additional campsites were estimated assuming that each campsite was full and that each site would have one vehicle parked in the lot.

Table 4 presents the future parking demand estimates for the proposed campsites. As shown in the table, the total parking demand is 8 parking spaces.

Table 4
Charmlee Park Future Parking Demand

Use	Amount	Rate	Parking Demand
Campsites	8 sites	1 space/site	8 spaces

Existing + Project Parking Demand - Non-Summer

Weekday Parking Demands

Table 5 presents the future weekday parking demand estimates for the Charmlee Park.

Table 5
Charmlee Park Future Parking Occupancies -
Weekday Non-Summer

Land Use	Peak Demand	Spaces Provided	% Occupied
Existing Charmlee Park	2 spaces	-	-
Proposed Campsites	8 spaces	-	-
Total	**10 spaces**	**35 spaces**	**29%**

The data presented in Table 5 show that the parking demand would be 10 spaces during the weekday and the lot would be 29% occupied. The parking supply will satisfy the parking demand for the proposed seven hike-in campsites and the one ADA campsite.

Weekend Parking Demand

Table 6 presents the future weekend parking demand estimates for the Charmlee Park.

Table 6
Charmlee Park Future Parking Occupancies -
Weekend Non-Summer

Land Use	Peak Demand	Spaces Provided	% Occupied
Existing Charmlee Park	19 spaces	-	-
Proposed Campsites	8 spaces	-	-
Total	**27 spaces**	**35 spaces**	**77%**

The data presented in Table 6 show that the parking demand would be 27 spaces during the weekend and the lot would be 77% occupied. The parking supply will satisfy the parking demand and allow for eight reserve spaces during the weekend peak parking period.

Existing + Project Parking Demand - Summer

Weekend Parking Demand

Table 7 presents the future weekend parking demand estimates for the Charmlee Park during the summer.

Table 7
Charmlee Park Future Parking Occupancies -
Weekend Summer

Land Use	Peak Demand	Spaces Provided	% Occupied
Existing Charmlee Park	2 spaces	-	-
Proposed Campsites	8 spaces	-	-
Total	**10 spaces**	**35 spaces**	**29%**

The data presented in Table 7 show that the parking demand would be 10 spaces during the weekend and the lot would be 29% occupied during the summer months. The parking supply will satisfy the parking demand and allow for 15 reserve spaces during the weekend peak parking period.

Additional Off-Site Parking

The project also proposes a shuttle that will circulate between Zuma Beach, the Point Dume Headlands, Corral Canyon Park, the Winding Way trail parking area (just off State Route 1), and Charmlee Park. The additional shuttle services will therefore allow park users to also park offsite and be shuttled into the park.

CORRAL CANYON PARK - PARKING ANALYSIS

Existing Parking Supply

There are 13 regular parking spaces, one ADA parking space, and one trailer parking space provided at the Corral Canyon Park, for a total of 15 parking spaces. Table 8 shows the number and type of parking spaces provided at the park.

Table 8
Corral Canyon Park Existing Parking Supply

Parking Spaces	Total
Regular	13
ADA	1
Trailer	1
Total	**15**

Parking Surveys - Non-Summer

Parking surveys were conducted by ATE at Corral Canyon Park from 10:00 A.M. through 5:00 P.M. on Friday, April 6, 2007. The number of vehicles parked in the lot were recorded on an hourly basis to determine the current parking demands. Worksheets showing the results of the parking surveys are attached. Table 9 summarizes the peak parking demands observed at the site.

Table 9
Corral Canyon Park Existing Peak Parking Demand - Non-Summer

Date	Peak Time	Available Spaces	Occupied Spaces	% Occupied
Friday 4/6/2007	1:00 P.M.	15	12	80%

The data presented in Table 9 shows that the peak parking demand during the weekday was at 1:00 P.M. when it was 80% occupied (12 occupied spaces). It was noted that during the lunch hour, parking for the Malibu Fish & Seafood Inc. restaurant, located adjacent to the Corral Canyon Park parking lot, overflowed into the park parking lot. Before the lunch period, one car was observed parking in the lot and after lunch, three cars were observed parking in the lot. Therefore, during the peak period, approximately 10 cars are assumed to be using the parking lot for restaurant parking.

Parking Surveys - Summer

Parking surveys were conducted by ATE at the site from 11:00 A.M. through 4:00 P.M. on Saturday, July 28, 2007. Table 10 summarizes the peak parking demands observed at the site.

Table 10
Corral Canyon Park Existing Peak Parking Demand - Summer

Date	Peak Time	Available Spaces	Occupied Spaces	% Occupied
Saturday 7/28/07	1:30 P.M.	15	15	100%

The data presented in Table 10 shows that the peak parking demand during a summer weekend day was at 1:30 P.M. when it was 100% occupied (15 occupied spaces). It was noted that during the lunch hour, parking for the Malibu Fish & Seafood Inc. restaurant, located adjacent to the Corral Canyon Park parking lot, overflowed into the park parking lot. Before the lunch period, three cars were observed parking in the lot, therefore during the peak period, approximately 12 cars are assumed to be using the parking lot for restaurant parking.

Future Parking Supply

The future parking supply provided at Corral Canyon Park would remain at 13 regular parking spaces, one ADA space, and one trailer space, for a total of 15 parking spaces.

Future Parking Demands

Future parking demands were developed based on the following assumption:

Campsite Use - Parking demands for the 16 additional campsites were estimated assuming that each campsite was full and that each site would have one vehicle parked in the lot.

Table 11 presents the future parking demand estimates for the proposed campsites. As shown in the table, the total parking demand is 16 parking spaces.

Table 11
Corral Canyon Park Future Parking Demand

Use	Amount	Rate	Parking Demand
Campsites	16 sites	1 space/site	16 spaces

Existing + Project Parking Demand - Non-Summer

Weekday Parking Demands

Table 12 presents the future weekday parking demand estimates for the Corral Canyon Park.

Table 12
Corral Canyon Park Future Parking Occupancies -
Weekday Non-Summer

Land Use	Peak Demand	Spaces Provided	Surplus or Deficit
Existing Corral Canyon Park	12 spaces	-	-
Proposed Campsites	16 spaces	-	-
Total	**28 spaces**	**15 spaces**	**-13 spaces**

The data presented in Table 12 show that the parking demand would be 28 spaces during the weekday. The parking supply would not satisfy the parking demand for the proposed 15 hike-in campsites and the one ADA campsite. It is noted that the existing parking demands observed at Corral Canyon Park include between 10 and 12 cars that used the restaurant. By eliminating the restaurant parkers, the future non-summer parking demand would be between 16 and 18 spaces, which results in a deficit of one to three spaces in the lot.

Existing + Project Parking Demand - Summer

Weekend Parking Demand

Table 13 presents the future weekend parking demand estimates for the Corral Canyon Park during the summer.

Table 13
Corral Canyon Park Future Parking Occupancies -
Weekend Summer

Land Use	Peak Demand	Spaces Provided	Surplus or Deficit
Existing Corral Canyon Park	15 spaces	-	-
Proposed Campsites	16 spaces	-	-
Total	**31 spaces**	**15 spaces**	**-16 spaces**

The data presented in Table 11 show that the parking demand would be 31 spaces during the weekend The parking supply would not satisfy the parking demands generated during the weekend peak parking period. It is noted that the existing parking demands observed at Corral Canyon Park include between 10 and 12 cars that used the restaurant. By eliminating the restaurant parkers, the future summer parking demand would be between 19 and 21 spaces, which results in a deficit of four to six spaces in the lot.

Parking Management Plan

Field observations confirmed that during the lunch hour, parking for the Malibu Fish & Seafood Inc. restaurant overflowed into the Corral Canyon Park parking lot. Before and after the peak lunch period, the parking demands for the trail head were between one and three cars. Field observations confirmed that between 10 and 12 cars parked in the lot during peak hours to use the restaurant. By eliminating restaurant parkers, future parking demands would be reduced to 16-18 spaces during the non-summer months and 19-21 spaces during the summer months, which would result in a deficit of one to three space during the non-summer and four to six spaces in the summer months.

In order to satisfy the parking demands at the Corral Canyon Park, SMMC/MRCA should consider expanding the existing parking area or restripe, if possible, to provide additional spaces in order to accommodate the new campsites. It is also recommended that a Parking Management Plan be developed by the SMMC/MRCA to manage the parking supply for the Corral Canyon Park site. Parking lot enforcement (signs, ordinance enforcement and/or parking attendants) would reduce restaurant parking in the park parking lot. The plan could include spaces that are reserved for campers, with additional parking available offsite at the other parks in the area (i.e. Solstice Canyon Park, Escondido Canyon parking areas, or Ramirez Canyon Park parking areas along Kanan Dume Road). Under the Parking Management Plan, campers who must park off site would unload at the Corral Canyon Park parking lot, park offsite and then be shuttled back to the park via the proposed ParkLINK shuttle. The ParkLINK Shuttle Service Area map is provided in the Technical Appendix. The plan should also include a short-term loading area be reserved for campers who must unload

and then park offsite. Information on the parking plan should be available for park users either online or at the Corral Canyon Park parking lot, to direct park users of where to park if the parking lot is full.

RAMIREZ CANYON PARK - TRAFFIC ANALYSIS

Project Description

Ramirez Canyon Park is located off Ramirez Canyon Road in the City of Malibu. Figure 1 shows the location of the project site within the City of Malibu. The project proposes to develop three new hike-in campsites and two new ADA campsites. Access to Ramirez Canyon Park is provided through a gated entrance at the terminus of Ramirez Canyon Road. Vehicular access to Ramirez Canyon Park will continue to be monitored to ensure that the total number of trips to and from the site do not exceed 80 daily trips. Additional parking will be provided from three new parking areas proposed along Kanan Dume Road. The park currently provides 56 existing parking spaces plus 4 van accessible spaces. 35 new parking spaces will be provided in the three proposed parking areas along Kanan Dume Road, for a total of 95 parking spaces. Currently the parking areas are dirt lots. The project proposes to pave and stripe the parking areas to provide angled parking spaces. Figure 2 illustrates the proposed site plan for proposed parking areas.

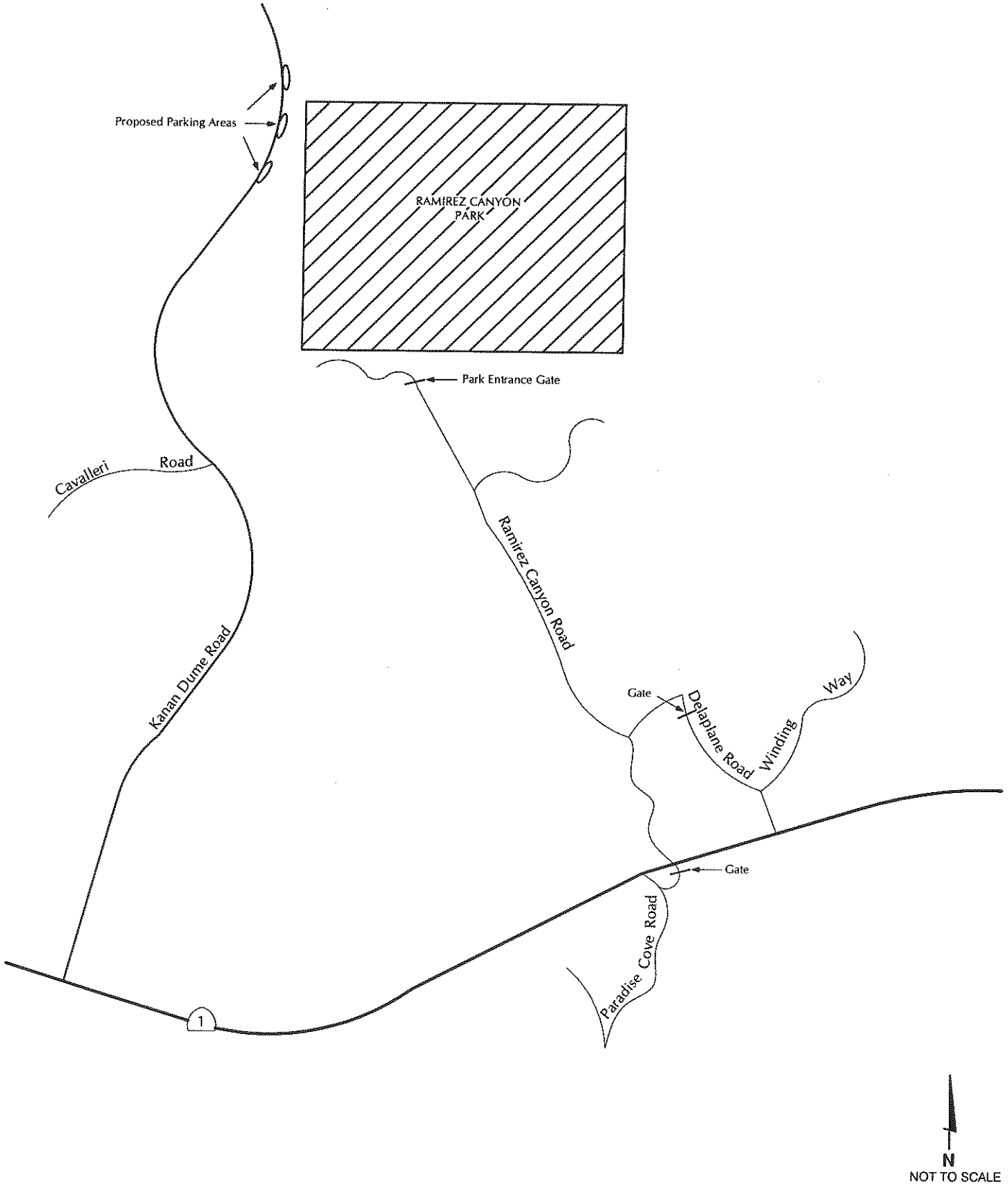
Existing Street Network

Access to Ramirez Canyon Park is provided through gated vehicular access roads from Pacific Coast Highway via Ramirez Canyon Road or via West Winding Way and Delaplane Road, and then through a gated entrance at the terminus of Ramirez Canyon Road. Vehicular access along Ramirez Canyon Road is limited to 80 daily trips. Additional hike-in access will be provided from the three proposed parking areas along Kanan Dume Road. Kanan Dume Road is 4-lanes adjacent to the three proposed parking areas, however south of these parking areas, Kanan Dume Road narrows to 2-lanes. Figure 1 shows the existing study area street network.

Existing Roadway Operations

ATE collected average daily traffic (ADT) volumes at the two entrance gates into Ramirez Canyon on Ramirez Canyon Road and Delaplane Road and Crain & Associates collected ADT volumes along Kanan Dume Road north of Cavalleri Road in a previous study for this project (count data is contained in the Technical Appendix).The existing traffic volumes were collected in December 2005 and July 2007.

The City of Malibu does not provide traffic impact criteria for street segments. Therefore, the operational characteristics of the study-area roadways were analyzed based on a standard set of Engineering Roadway Design Capacities (see Technical Appendix for a summary of the roadway design capacities).



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EXISTING STREET NETWORK/PROJECT SITE LOCATION

FIGURE 1

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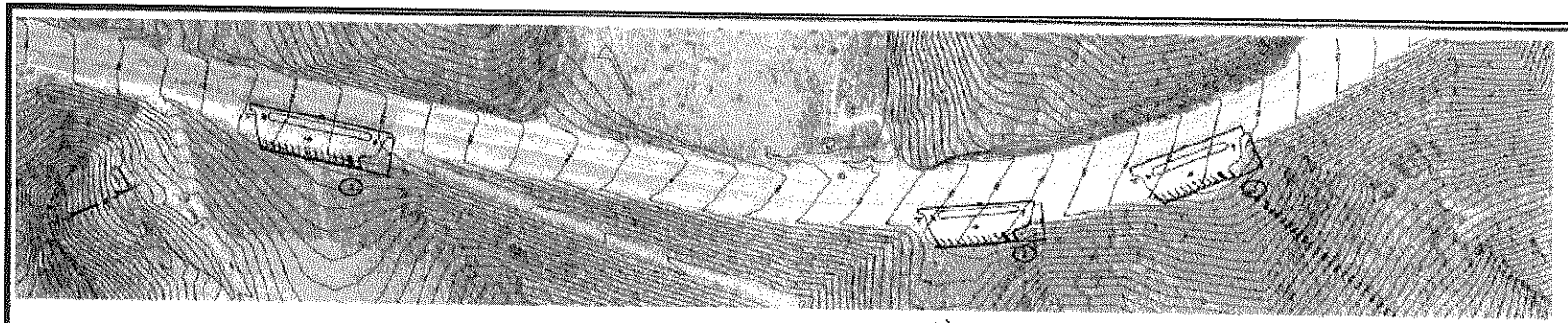
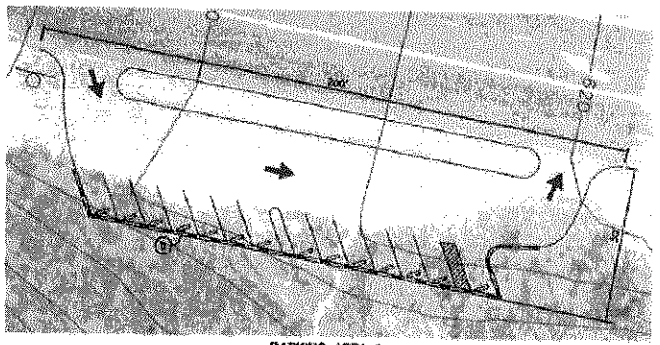
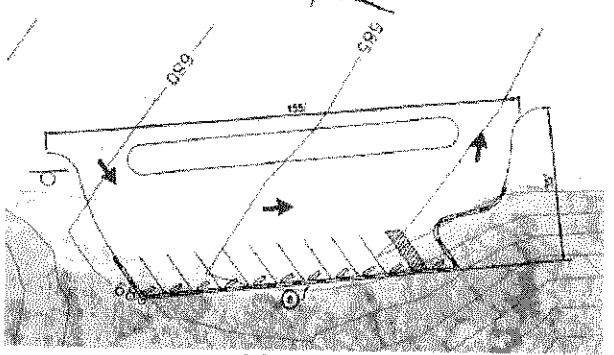


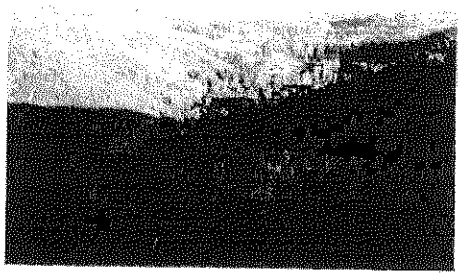
KANAN DUME ROAD



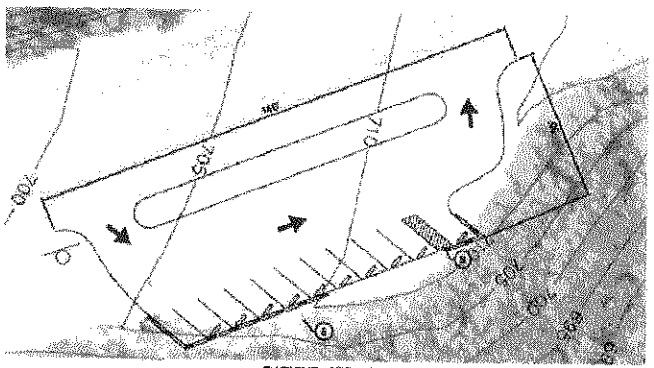
PARKING AREA 1



PARKING AREA 2

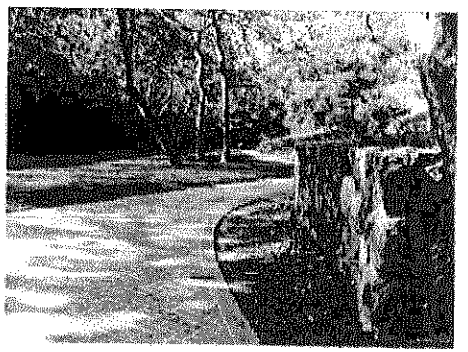


RAMIREZ CANYON



PARKING AREA 3

PROPOSED ENTRY AREA AND DAY USE AREA



EXISTING MEADOW AREA

CONCEPT

DUDEK
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PARKING – KANAN DUME ROAD
RAMIREZ CANYON
LOCAL COASTAL PROGRAM AMENDMENT
MALIBU, CALIFORNIA
SHEET 13 OF 23
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PROJECT SITE PLAN FOR KANAN DUME PARKING AREAS

FIGURE 2

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Figures 3 and 4 show the existing average daily traffic volumes during weekdays and weekends. Table 14 shows the existing ADT volumes and Levels of Service (LOS) for the key roadways in the project study area.

Table 14
Existing Average Daily Traffic Volumes

Roadway Segment	Geometry	Weekday ADT	Weekend ADT	LOS
Kanan Dume Road n/o Cavalleri Road	2-lane undivided	6,709	7,099	LOS A
Ramirez Canyon Road s/o Entrance Gate	2-lane undivided	391	327	LOS A
Delaplane Road s/o Entrance Gate	2-lane undivided	383	289	LOS A

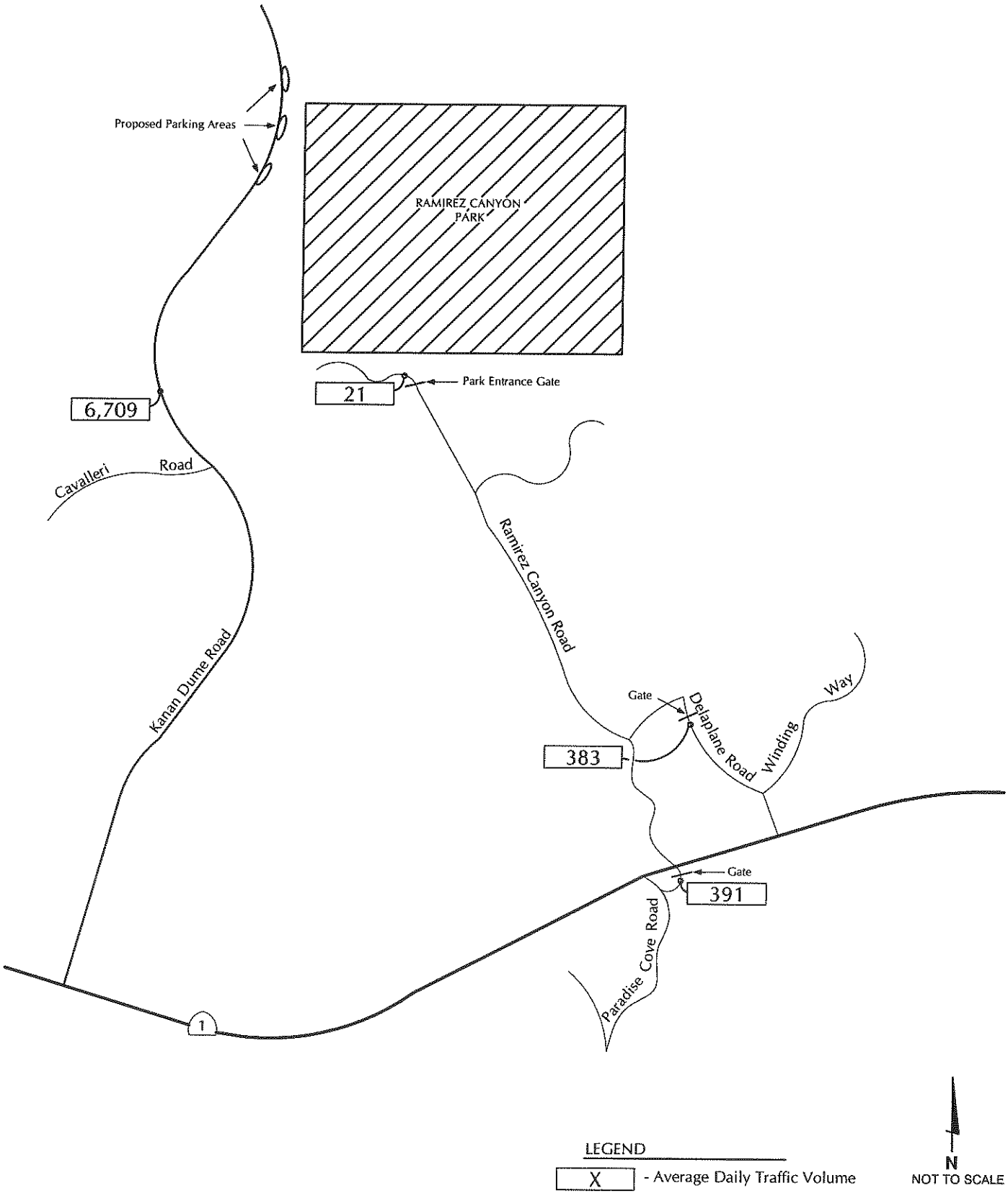
As shown in Table 14, all of the study area roadways operate at LOS A or better during weekdays and weekends.

Project Trip Generation

Vehicular access to Ramirez Canyon Park will remain limited to 80 daily trips. The campsites will remain by reservation-only and therefore will not generate additional traffic above the current 80 ADT limit. The new parking areas along Kanan Dume Road would generate new trips to the trail heads. As a worst-case scenario, it is assumed that all the parking will be new and will generate additional traffic demands to the park.

Trip generation estimates for the proposed project were calculated based on the data presented in the San Diego Traffic Generators manual[1] for Regional Parks. The data was used to determine the total number of trips per parking stall for the project. Table 15 shows the trip generation estimates for the Ramirez Canyon Park Project during weekdays.

[1] San Diego Traffic Generators, San Diego Association of Governments, April 2002.



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EXISTING AVERAGE DAILY TRAFFIC VOLUMES - WEEKDAYS

FIGURE 3

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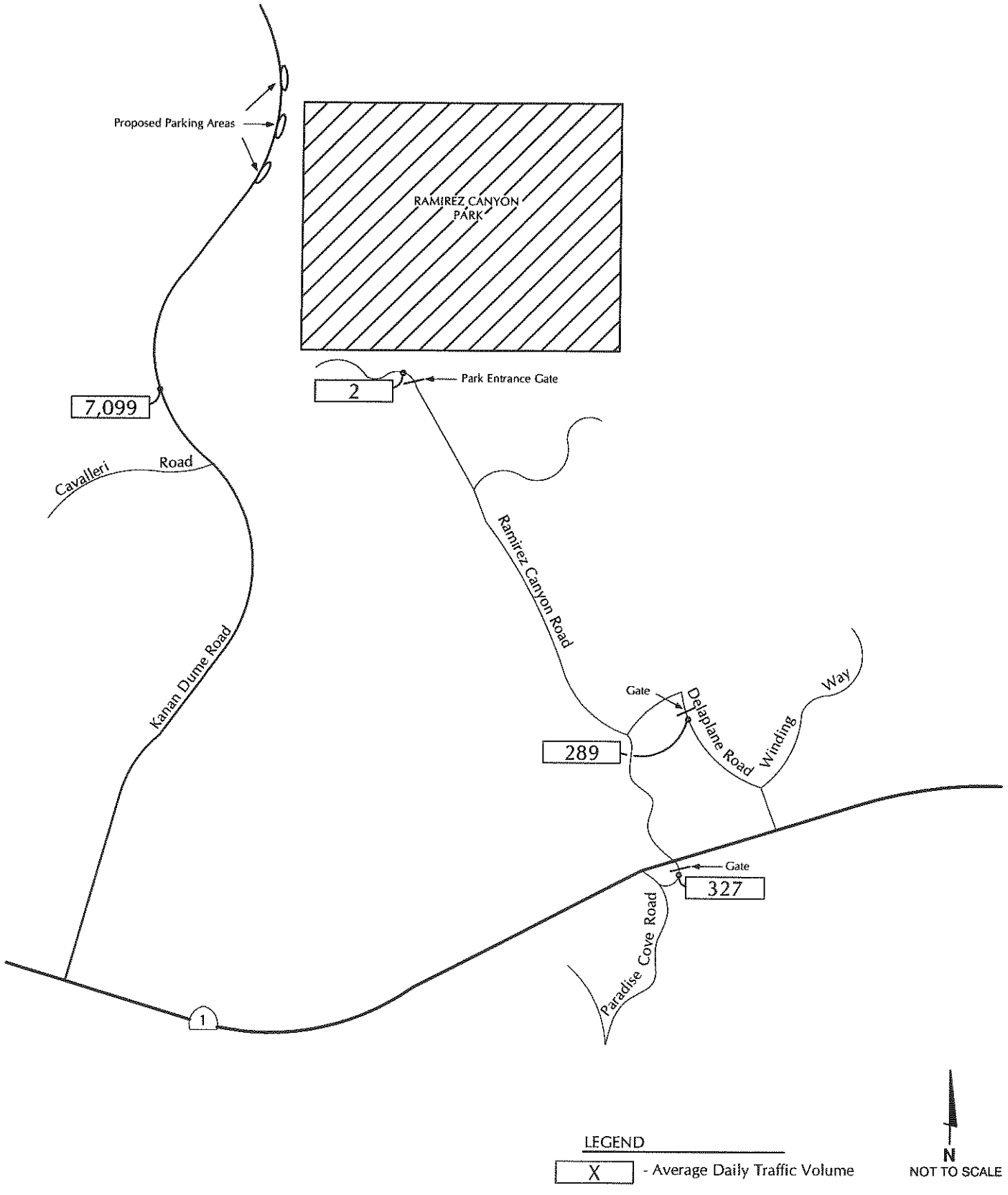

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EXISTING AVERAGE DAILY TRAFFIC VOLUMES - WEEKENDS

FIGURE 4

LDH - 06121

Table 15
Trip Generation Estimates -
Weekdays

Land Use	Size	ADT		A.M. Peak		P.M. Peak	
		Rate	Trips	Rate	Trips	Rate	Trips
Regional Park	35 paved spaces	3.6	126	0.14	5	0.29	10

The data presented in Table 15 show that the proposed project would generate 126 ADT, 5 A.M., and 10 P.M. peak hour trips during weekdays.
Trip generation estimates were also calculated for weekends. The rates presented in the San Diego Traffic Generators manual do not include peak hour rates for weekends. Therefore, additional data was collected at Charmlee Park and Corral Canyon Park. Summer weekend traffic counts were conducted at the parks on Saturday, July 28, 2007. Table 16 shows the trip generation estimates for the Ramirez Canyon Park Project during weekends.

Table 16
Trip Generation Estimates -
Weekends

Land Use	Size	ADT		Peak Hour	
		Rate	Trips	Rate	Trips
Regional Park	35 paved spaces	5.3	186	0.36	13

The data presented in Table 16 show that the proposed project would generate 186 ADT and 13 peak hour trips during weekends.

Project Trip Distribution and Assignment

The existing trip cap for Ramirez Canyon will remain at 80 daily trips and will not allow any increase in traffic volumes along Ramirez Canyon Road. However, the new parking areas along Kanan Dume Road would generate new trips to the trail heads. Therefore, all traffic generated by the project was assumed to use Kanan Dume Road and was assumed to be from the City of Malibu, located to the south.

Existing + Project Roadway Operations

Figures 5 and 6 show the existing + project ADT volumes for the study-area roadways during weekdays and weekends. Table 17 compares the existing and existing + project ADT volumes during weekdays and Table 18 compares the existing and existing + project ADT volumes during weekends.

Table 17
Existing + Project Average Daily Traffic Volumes - Weekdays

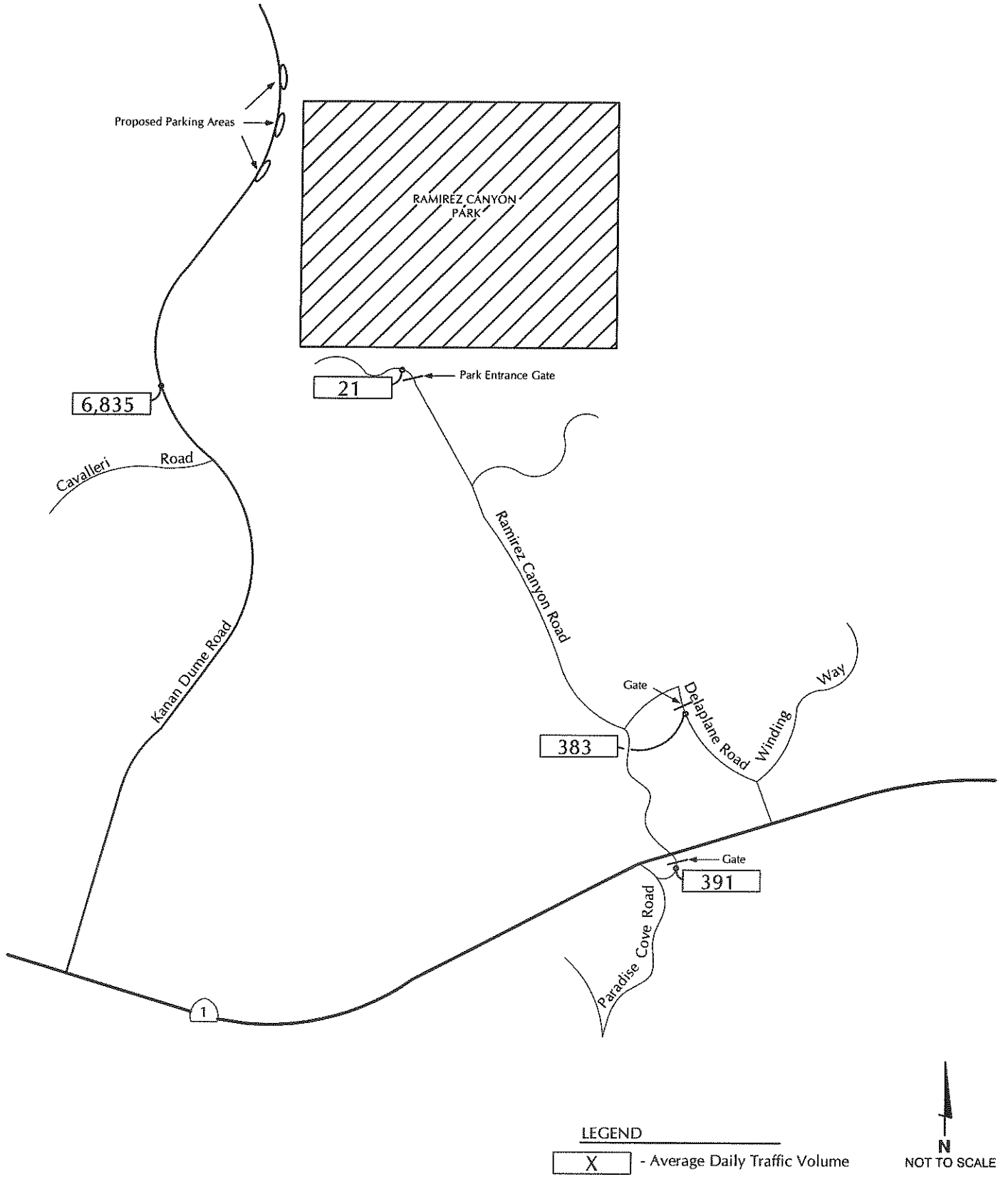
Roadway Segment	Existing ADT	Existing + Project ADT	Project-Added ADT	LOS
Kanan Dume Road n/o Cavalleri Road	6,709	6,835	126	A
Ramirez Canyon Road s/o Entrance Gate	391	391	0	A
Delaplane Road s/o Entrance Gate	383	383	0	A

Table 17 shows that all of the study-area roadways will operate at LOS A or better with project-added traffic.

Table 18
Existing + Project Average Daily Traffic Volumes - Weekends

Roadway Segment	Existing ADT	Existing + Project ADT	Project-Added ADT	LOS
Kanan Dume Road n/o Cavalleri Road	7,099	7,285	186	A
Ramirez Canyon Road s/o Entrance Gate	327	327	0	A
Delaplane Road s/o Entrance Gate	289	289	0	A

Table 18 shows that all of the study-area roadways will operate at LOS A or better with project-added traffic.



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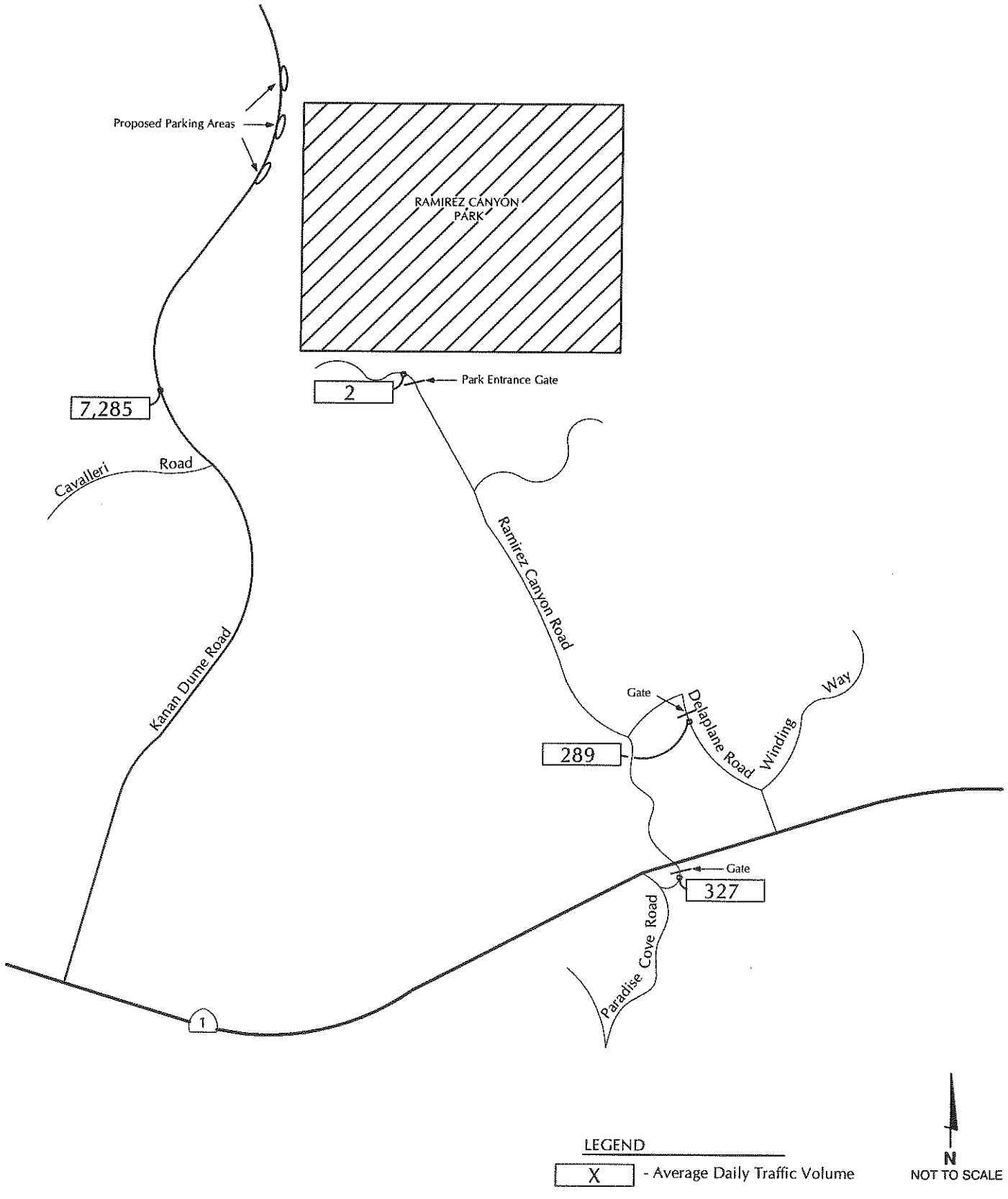
EXISTING + PROJECT AVERAGE DAILY TRAFFIC VOLUMES - WEEKDAYS

FIGURE 5

LDH - 06121



ASSOCIATED TRANSPORTATION ENGINEERS

EXISTING + PROJECT AVERAGE DAILY TRAFFIC VOLUMES - WEEKENDS

FIGURE 6

LDH - 06121

Kanan Dume Road Parking Areas Analysis

The project proposes to provide additional hike-in access to Ramirez Canyon Park via three parking areas along Kanan Dume Road. Figure 2 shows the site plan for the proposed parking areas for the project. Kanan Dume Road is four lanes adjacent to Parking Areas 2 and 3 and merges to two lanes adjacent to the proposed entrance to Parking Area 1. The posted speed along this section of roadway is 50 MPH. Field observations along Kanan Dume Road determined that the sight distance is approximately 700 feet to the north and approximately 650 feet to the south of the parking areas.

The proposed parking lot improvements are located within the Kanan Dume Road public right of way (a county road), and therefore would be required to meet Los Angeles County standards. Based on preliminary review of the proposed parking lot improvements, road widening and/or restriping may be necessary to meet county standards. Our initial review show that Kanan Dume Road could be widened and/or restriped from approximately 300 feet before Parking Area 1 until 100 feet after Parking Area 3, to include an eight foot shoulder to/from the parking areas.

■ ■ ■

REFERENCES AND PERSONS CONTACTED

Associated Transportation Engineers

Richard L. Pool, Principal Engineer
Alicia M. Zimmerman, Principal Engineer
Scott A. Schell, AICP, Principal Transportation Planner
Dan L. Dawson, Supervising Transportation Planner
Lauren D. Hobson, Traffic Technician II

Persons Contacted

Bret Foster, Penfield & Smith

Written Material

San Diego Traffic Generators, San Diego Association of Governments, April 2002

TECHNICAL APPENDIX

CONTENTS:

PARKING COUNT DATA
TRAFFIC COUNT DATA
ENGINEERING DESIGN CAPACITY THRESHOLDS
PARKLINK SHUTTLE SERVICE AREA MAP

PARKING COUNT DATA

ASSOCIATED TRANPORTATION ENGINEERS
CHARMLEE COUNTY PARK PARKING SURVEY

DATE: 4/6/2007 Friday

HOURLY PARKING TOTALS

TIME	TOTAL				
	SPACES	CARS	HANDI.	ILL.	% OCCUPIED
10:00	30	0	0	0	0%
11:00	30	2	0	0	7%
12:00	30	1	0	0	3%
1:00	30	1	0	0	3%
2:00	30	2	0	0	7%
3:00	30	1	0	0	3%
4:00	30	0	0	0	0%
5:00	30	0	0	0	0%

* Parking lot includes 28 regular spaces + 2 handi. spaces

DATE: 4/14/2007 Saturday

HOURLY PARKING TOTALS

TIME	TOTAL				
	SPACES	CARS	HANDI.	ILL.	% OCCUPIED
10:30	30	17	0	0	57%
12:10	30	19	0	0	63%
1:50	30	14	0	0	47%
3:30	30	9	0	0	30%

ASSOCIATED TRANPORTATION ENGINEERS
CHARMLEE COUNTY PARK PARKING SURVEY

DATE: 7/28/2007 Saturday

HOURLY PARKING TOTALS

TIME	TOTAL				
	SPACES	CARS	HANDI.	ILL.	% OCCUPIED
10:00	30	0	0	0	0%
11:00	30	0	0	0	0%
12:00	30	2	0	0	7%
2:00	30	1	0	0	3%
3:15	30	0	0	0	0%

Notes: Parking lot includes 28 regular spaces + 2 ADA spaces

CORRAL CANYON PARK

DATE: 4/6/2007 Friday

HOURLY PARKING TOTALS

TIME	TOTAL				
	SPACES	CARS	HANDI.	ILL.	% OCCUPIED
10:00	15	-	-	-	-
11:00	15	-	-	-	-
12:00	15	1	0	0	7%
1:00	15	12	0	1	87%
2:00	15	12	0	0	80%
3:00	15	8	0	0	53%
4:00	15	3	0	0	20%
5:00	15	1	0	0	7%

* 13 marked spaces + 1 handi. space + 1 trailer space
* adj. to seafood restaurant, during lunch hour rush, people used park parking lot to visit restaurant

ASSOCIATED TRANPORTATION ENGINEERS
CORRAL CANYON PARK

DATE: 7/28/2007 Saturday

HOURLY PARKING TOTALS

TIME	TOTAL					
	SPACES	CARS	HANDI.	TRAILER	ILL.	% OCCUPIED
11:40	15	3	0	1	0	27%
1:33	15	13	1	0	2	107%
2:33	15	13	1	0	2	107%
3:40	15	13	1	0	2	107%

Notes: Parking lot includes 13 regular spaces + 1 ADA space + 1 trailer space. Parking lot is located adj. to a seafood restaurant. During the lunch-hour rush, people used the parking lot for the park to visit the restaurant.

ASSOCIATED TRANPORTATION ENGINEERS
KANAN DUME ROAD PARKING SURVEY

DATE: 7/28/2007 Saturday

HOURLY PARKING TOTALS
PARKING AREA 1

TIME	TOTAL		
	SPACES	CARS	% OCCUPIED
11:00	9	0	0%
12:15	9	0	0%
1:20	9	0	0%
2:15	9	0	0%

PARKING AREA 2

TIME	TOTAL		
	SPACES	CARS	% OCCUPIED
11:00	7	0	0%
12:15	7	1	14%
1:20	7	0	0%
2:15	7	0	0%

PARKING AREA 3

TIME	TOTAL		
	SPACES	CARS	% OCCUPIED
11:00	7	0	0%
12:15	7	0	0%
1:20	7	0	0%
2:15	7	0	0%

TRAFFIC COUNT DATA

ASSOCIATED TRANSPORTATION ENGINEERS
SANTA MONICA CONSERVANCY PARKS PROJECT

RAMIREZ CANYON PARK STAFF TRIPS LOG SUMMARY

Date		Total Park Trips
Friday	7/20/2007	18
Saturday	7/21/2007	2
Sunday	7/22/2007	2
Monday	7/23/2007	19
Tuesday	7/24/2007	18
Wednesday	7/25/2007	15
Thursday	7/26/2007	25
Friday	7/27/2007	31

Total Weekday Average: 21
Total Weekend Average: 2

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

24-HOUR ADT COUNT SUMMARY

CLIENT: CRAIN AND ASSOCIATES
PROJECT: TRAFFIC COUNTS
LOCATION: KANAN DUME ROAD NORTH OF CAVALLERI ROAD
DATE: SATURDAY DECEMBER 2, 2006

DIRECTION:	NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	15	9	3	8	35
1:00	8	9	6	3	26
2:00	5	7	2	1	15
3:00	3	3	3	5	14
4:00	0	2	1	2	5
5:00	2	4	3	5	14
6:00	7	8	9	18	42
7:00	30	26	24	28	108
8:00	25	35	46	55	161
9:00	60	53	59	68	240
10:00	61	59	55	65	240
11:00	63	61	62	50	236
12:00	59	68	58	64	249
13:00	80	53	68	78	279
14:00	74	70	72	68	284
15:00	66	84	84	72	306
16:00	77	70	65	75	287
17:00	95	88	74	54	311
18:00	60	54	54	32	200
19:00	27	32	34	34	127
20:00	16	24	22	30	92
21:00	18	23	28	44	113
22:00	26	22	32	22	102
23:00	28	22	20	20	90
				TOTAL	3576

AM PEAK HOUR	1045-1145
VOLUME	251
PM PEAK HOUR	1645-1745
VOLUME	332

DIRECTION:	SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	8	13	12	10	43
1:00	9	6	4	2	21
2:00	5	0	5	3	13
3:00	4	2	2	1	9
4:00	2	0	1	2	5
5:00	2	1	8	4	15
6:00	10	6	14	15	45
7:00	18	27	28	35	108
8:00	40	43	49	62	194
9:00	45	39	43	40	167
10:00	54	47	46	56	203
11:00	68	68	62	79	277
12:00	83	69	91	79	322
13:00	75	63	61	85	284
14:00	66	69	67	78	280
15:00	63	62	53	80	258
16:00	72	74	62	57	265
17:00	61	73	45	48	227
18:00	43	48	42	44	177
19:00	49	51	46	42	188
20:00	34	24	23	32	113
21:00	32	32	29	41	134
22:00	29	23	20	23	95
23:00	15	27	21	17	80
				TOTAL	3523

AM PEAK HOUR	1100-1200
VOLUME	277
PM PEAK HOUR	1200-1300
VOLUME	322

TOTAL BI-DIRECTIONAL VOLUME	7099

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

24-HOUR ADT COUNT SUMMARY

CLIENT: CRAIN AND ASSOCIATES
PROJECT: TRAFFIC COUNTS
LOCATION: KANAN DUME ROAD NORTH OF CAVALLERI ROAD
DATE: SUNDAY DECEMBER 3, 2006

DIRECTION:	NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	18	12	16	12	58
1:00	13	14	6	10	43
2:00	10	10	5	5	30
3:00	6	4	4	1	15
4:00	4	3	5	0	12
5:00	0	1	3	3	7
6:00	4	6	9	12	31
7:00	12	13	10	22	57
8:00	19	27	28	26	100
9:00	26	42	31	44	143
10:00	36	47	46	54	183
11:00	52	52	61	68	233
12:00	62	64	72	84	282
13:00	61	66	64	64	255
14:00	58	66	59	65	248
15:00	80	68	84	69	301
16:00	56	75	68	66	265
17:00	68	64	38	42	212
18:00	44	35	14	23	116
19:00	29	31	25	26	111
20:00	34	24	22	22	102
21:00	30	16	15	9	70
22:00	16	8	14	6	44
23:00	8	8	7	6	29
				TOTAL	2947

AM PEAK HOUR	1100-1200
VOLUME	233
PM PEAK HOUR	1500-1600
VOLUME	301

DIRECTION:	SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	16	10	10	16	52
1:00	8	4	7	6	25
2:00	10	7	4	8	29
3:00	5	2	2	0	9
4:00	1	1	2	3	7
5:00	2	1	4	8	15
6:00	6	5	5	10	26
7:00	10	12	8	22	52
8:00	21	21	23	23	88
9:00	27	24	34	42	127
10:00	54	46	55	47	202
11:00	41	60	65	52	218
12:00	56	69	55	68	248
13:00	80	76	85	87	328
14:00	68	61	73	76	278
15:00	90	62	70	86	308
16:00	67	64	70	50	251
17:00	60	45	41	40	186
18:00	34	36	43	37	150
19:00	18	29	24	20	91
20:00	35	26	27	22	110
21:00	24	21	22	21	88
22:00	16	11	10	8	45
23:00	11	7	3	1	22
				TOTAL	2955

AM PEAK HOUR	1100-1200
VOLUME	218
PM PEAK HOUR	1300-1400
VOLUME	328

TOTAL BI-DIRECTIONAL VOLUME	5902

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

24-HOUR ADT COUNT SUMMARY

CLIENT: CRAIN AND ASSOCIATES
PROJECT: TRAFFIC COUNTS
LOCATION: KANAN DUME ROAD NORTH OF CAVALLERI ROAD
DATE: MONDAY DECEMBER 4, 2006

DIRECTION:	NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	6	3	2	4	15
1:00	3	0	1	3	7
2:00	0	3	2	1	6
3:00	3	1	2	0	6
4:00	0	3	1	2	6
5:00	2	6	3	13	24
6:00	17	20	27	16	80
7:00	33	46	34	48	161
8:00	51	52	53	55	211
9:00	47	54	48	65	214
10:00	64	57	52	43	216
11:00	68	40	56	48	212
12:00	50	54	56	48	208
13:00	66	58	46	56	226
14:00	56	66	70	77	269
15:00	78	82	102	78	340
16:00	76	92	81	64	313
17:00	92	92	74	65	323
18:00	60	52	44	42	198
19:00	40	35	18	27	120
20:00	23	10	18	19	70
21:00	10	14	12	11	47
22:00	12	14	11	10	47
23:00	6	8	9	6	29
				TOTAL	3348

AM PEAK HOUR	0945-1045
VOLUME	238
PM PEAK HOUR	1530-1630
VOLUME	348

DIRECTION:	SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	2	4	2	2	10
1:00	5	2	4	1	12
2:00	1	1	2	2	6
3:00	0	1	1	0	2
4:00	0	0	1	7	8
5:00	4	5	15	11	35
6:00	20	31	44	62	157
7:00	69	76	98	98	341
8:00	84	60	64	59	267
9:00	55	66	53	52	226
10:00	72	42	50	45	209
11:00	46	42	43	68	199
12:00	67	48	53	54	222
13:00	59	36	47	63	205
14:00	45	50	65	55	215
15:00	57	70	59	52	238
16:00	58	51	49	65	223
17:00	51	52	58	68	229
18:00	57	49	38	36	180
19:00	32	27	40	36	135
20:00	25	25	18	31	99
21:00	21	13	16	16	66
22:00	22	13	13	10	58
23:00	5	6	4	4	19
				TOTAL	3361

AM PEAK HOUR	0715-0815
VOLUME	356
PM PEAK HOUR	1430-1530
VOLUME	247

TOTAL BI-DIRECTIONAL VOLUME	6709

//

TimeMark, Incorporated

Description 1 : Ramierez Canyon Road
Description 2 :
Description 3 :

Site: 06121

Volume (1 Ch/pg., 60 Min., 7 Days)
Channel: Near lane fl

Interval Begin	Mon 7/16/2007	Tue 7/17/2007	Wed 7/18/2007	Thu 7/19/2007	Fri 7/20/2007	Sat 7/21/2007	Sun 7/22/2007	Weekday Avg	Week Avg
12:00 AM	*	*	*	*	*	6	33	*	19
1:00 AM	*	*	*	*	*	2	22	*	12
2:00 AM	*	*	*	*	*	3	11	*	7
3:00 AM	*	*	*	*	*	0	0	*	0
4:00 AM	*	*	*	*	*	0	0	*	0
5:00 AM	*	*	*	*	*	1	1	*	1
6:00 AM	*	*	*	*	*	1	2	*	1
7:00 AM	*	*	*	*	*	12	3	*	7
8:00 AM	*	*	*	*	*	12	9	*	10
9:00 AM	*	*	*	*	15	15	15	15	15
10:00 AM	*	*	*	*	25	19	19	25	21
11:00 AM	*	*	*	*	30	17	11	30	19
12:00 PM	*	*	*	*	17	19	27	17	21
1:00 PM	*	*	*	*	30	15	7	30	17
2:00 PM	*	*	*	*	30	18	14	30	20
3:00 PM	*	*	*	*	42	17	23	42	27
4:00 PM	*	*	*	*	25	19	14	25	19
5:00 PM	*	*	*	*	30	15	23	30	22
6:00 PM	*	*	*	*	20	26	16	20	20
7:00 PM	*	*	*	*	14	27	15	14	18
8:00 PM	*	*	*	*	9	44	13	9	22
9:00 PM	*	*	*	*	13	25	7	13	15
10:00 PM	*	*	*	*	9	29	5	9	14
11:00 PM	*	*	*	*	1	15	6	1	7
Totals	*	*	*	*	310	357	296	310	334
AM Peak	*	*	*	*	11:00 AM	10:00 AM	12:00 AM	11:00 AM	10:00 AM
Volume	*	*	*	*	30	19	33	30	21
PM Peak	*	*	*	*	3:00 PM	8:00 PM	12:00 PM	3:00 PM	3:00 PM
Volume	*	*	*	*	42	44	27	42	27

12

TimeMark, Incorporated

Description 1 : Ramierez Canyon Road
Description 2 :
Description 3 :

Site: 06121

Volume (1 Ch/pg., 60 Min., 7 Days)
Channel: Near lane fl

Interval Begin	Mon 7/23/2007	Tue 7/24/2007	Wed 7/25/2007	Thu 7/26/2007	Fri 7/27/2007	Sat 7/28/2007	Sun 7/29/2007	Weekday Avg	Week Avg
12:00 AM	1	1	0	1	2	4	*	1	1
1:00 AM	0	2	0	0	1	2	*	0	0
2:00 AM	1	0	0	0	0	4	*	0	0
3:00 AM	1	3	2	2	1	7	*	1	2
4:00 AM	3	1	0	2	1	2	*	1	1
5:00 AM	1	2	2	2	1	3	*	1	1
6:00 AM	4	6	12	5	7	8	*	6	7
7:00 AM	9	11	14	11	13	7	*	11	10
8:00 AM	25	26	21	23	18	16	*	22	21
9:00 AM	34	19	22	24	30	15	*	25	24
10:00 AM	31	23	17	14	20	13	*	21	19
11:00 AM	25	27	38	29	32	*	*	30	30
12:00 PM	28	31	23	29	34	*	*	29	29
1:00 PM	32	43	28	39	38	*	*	36	36
2:00 PM	43	36	28	32	34	*	*	34	34
3:00 PM	40	36	47	51	65	*	*	47	47
4:00 PM	31	39	30	31	30	*	*	32	32
5:00 PM	24	37	33	39	34	*	*	33	33
6:00 PM	12	16	20	14	14	*	*	15	15
7:00 PM	13	9	15	11	11	*	*	11	11
8:00 PM	11	4	10	6	16	*	*	9	9
9:00 PM	6	11	7	8	12	*	*	8	8
10:00 PM	4	8	7	2	9	*	*	6	6
11:00 PM	1	1	4	3	4	*	*	2	2
Totals	380	392	380	378	427	81	*	381	378
AM Peak	9:00 AM	11:00 AM	11:00 AM	11:00 AM	11:00 AM	8:00 AM	*	11:00 AM	11:00 AM
Volume	34	27	38	29	32	16	*	30	30
PM Peak	2:00 PM	1:00 PM	3:00 PM	3:00 PM	3:00 PM	*	*	3:00 PM	3:00 PM
Volume	43	43	47	51	65	*	*	47	47

2

TimeMark, Incorporated

Description 1 : Winding Way
Description 2 : s/o Gate
Description 3 :

Site: 06121

Volume (1 Ch/pg., 60 Min., 7 Days)
Channel: Near lane fl

Interval Begin	Mon 7/16/2007	Tue 7/17/2007	Wed 7/18/2007	Thu 7/19/2007	Fri 7/20/2007	Sat 7/21/2007	Sun 7/22/2007	Weekday Avg	Week Avg
12:00 AM	*	*	*	*	*	4	2	*	3
1:00 AM	*	*	*	*	*	4	4	*	4
2:00 AM	*	*	*	*	*	2	4	*	3
3:00 AM	*	*	*	*	*	0	1	*	0
4:00 AM	*	*	*	*	*	1	0	*	0
5:00 AM	*	*	*	*	*	2	2	*	2
6:00 AM	*	*	*	*	*	6	4	*	5
7:00 AM	*	*	*	*	*	19	2	*	10
8:00 AM	*	*	*	*	*	13	3	*	8
9:00 AM	*	*	*	*	6	28	14	6	16
10:00 AM	*	*	*	*	44	19	11	44	24
11:00 AM	*	*	*	*	36	35	14	36	28
12:00 PM	*	*	*	*	28	25	22	28	25
1:00 PM	*	*	*	*	34	26	13	34	24
2:00 PM	*	*	*	*	23	31	7	23	20
3:00 PM	*	*	*	*	41	32	17	41	30
4:00 PM	*	*	*	*	17	20	21	17	19
5:00 PM	*	*	*	*	16	20	9	16	15
6:00 PM	*	*	*	*	20	21	15	20	18
7:00 PM	*	*	*	*	14	14	21	14	16
8:00 PM	*	*	*	*	11	15	5	11	10
9:00 PM	*	*	*	*	11	10	5	11	8
10:00 PM	*	*	*	*	6	18	6	6	10
11:00 PM	*	*	*	*	4	3	7	4	4
Totals	*	*	*	*	311	368	209	311	302
AM Peak	*	*	*	*	10:00 AM	11:00 AM	9:00 AM	10:00 AM	11:00 AM
Volume	*	*	*	*	44	35	14	44	28
PM Peak	*	*	*	*	3:00 PM	3:00 PM	12:00 PM	3:00 PM	3:00 PM
Volume	*	*	*	*	41	32	22	41	30

TimeMark, Incorporated

Description 1 : Winding Way
Description 2 : s/o Gate
Description 3 :

Site: 06121

Volume (1 Ch/pg., 60 Min., 7 Days)
Channel: Near lane fl

Interval Begin	Mon 7/23/2007	Tue 7/24/2007	Wed 7/25/2007	Thu 7/26/2007	Fri 7/27/2007	Sat 7/28/2007	Sun 7/29/2007	Weekday Avg	Week Avg
12:00 AM	1	3	2	5	2	12	*	2	4
1:00 AM	0	0	2	1	3	2	*	1	1
2:00 AM	0	0	3	0	0	4	*	0	1
3:00 AM	1	2	1	1	1	0	*	1	1
4:00 AM	3	6	3	1	0	2	*	2	2
5:00 AM	3	2	2	3	2	1	*	2	2
6:00 AM	6	19	15	14	11	7	*	13	12
7:00 AM	16	19	23	13	18	20	*	17	18
8:00 AM	22	31	15	28	35	14	*	26	24
9:00 AM	31	37	28	62	38	28	*	39	37
10:00 AM	25	22	31	29	35	4	*	28	24
11:00 AM	19	18	34	34	43	*	*	29	29
12:00 PM	30	32	31	35	39	*	*	33	33
1:00 PM	25	32	23	26	23	*	*	25	25
2:00 PM	30	18	16	24	24	*	*	22	22
3:00 PM	25	25	26	43	40	*	*	31	31
4:00 PM	26	20	26	12	15	*	*	19	19
5:00 PM	17	18	26	19	21	*	*	20	20
6:00 PM	16	18	13	27	10	*	*	16	16
7:00 PM	19	13	13	12	13	*	*	14	14
8:00 PM	6	13	9	12	18	*	*	11	11
9:00 PM	12	7	7	5	7	*	*	7	7
10:00 PM	3	4	7	6	7	*	*	5	5
11:00 PM	0	6	2	7	4	*	*	3	3
Totals	336	365	358	419	409	94	*	366	361
AM Peak	9:00 AM	9:00 AM	11:00 AM	9:00 AM	11:00 AM	9:00 AM	*	9:00 AM	9:00 AM
Volume	31	37	34	62	43	28	*	39	37
PM Peak	12:00 PM	12:00 PM	12:00 PM	3:00 PM	3:00 PM	*	*	12:00 PM	12:00 PM
Volume	30	32	31	43	40	*	*	33	33

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ENGINEERING DESIGN CAPACITY THRESHOLDS

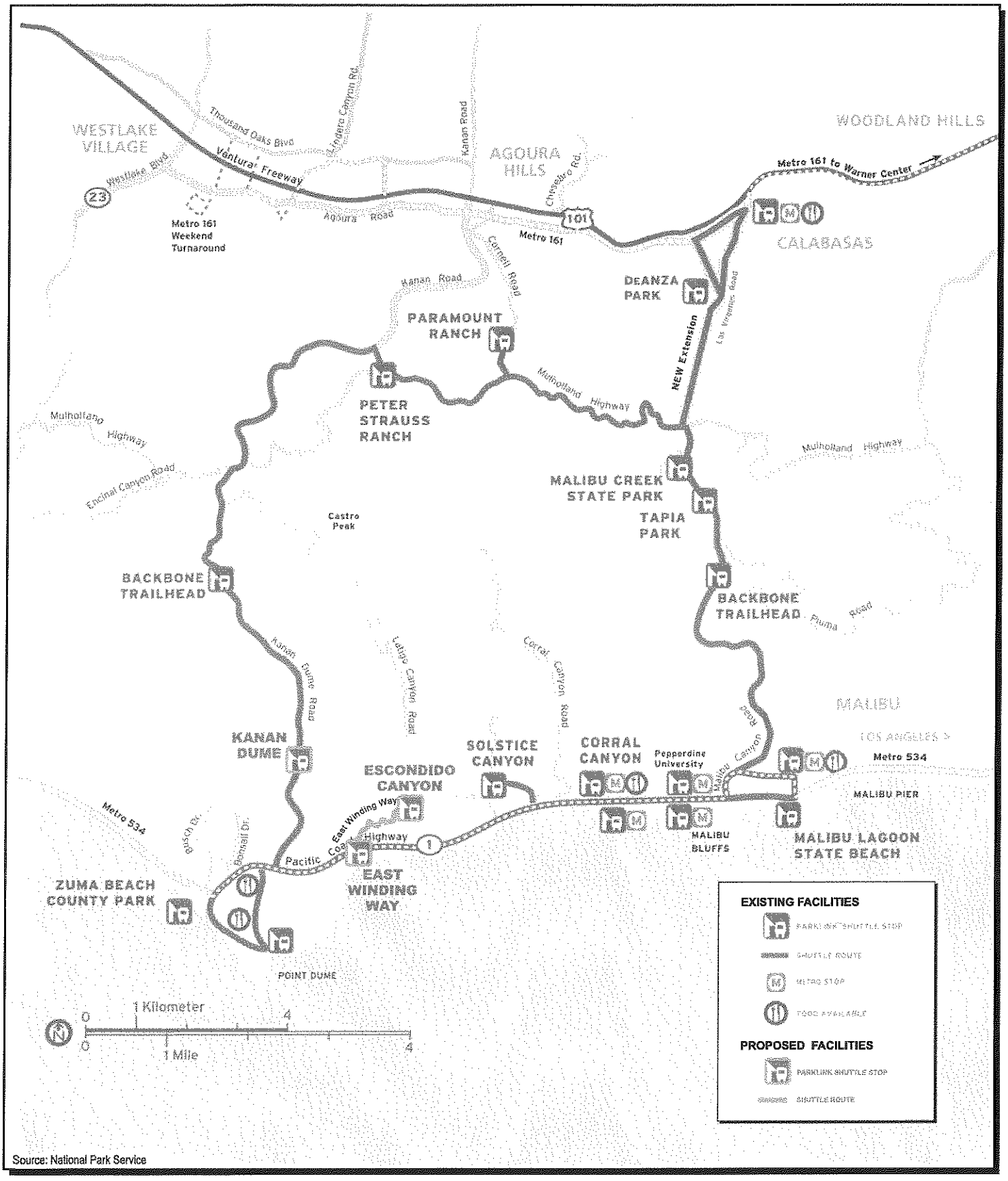
SANTA BARBARA COUNTY PUBLIC WORKS DEPARTMENT
ROADWAY DESIGN CAPACITIES

TYPE OF ROADWAY	# OF LANES	LOS A		LOS B		LOS C		LOS D		LOS E	
		Low	High	Low	High	Low	High	Low	High	Low	High
Arterial	2 Lanes	8,100	12,000	9,400	14,000	10,800	16,000	12,100	18,000	13,500	20,000
Arterial	4 Lanes	16,100	23,900	18,900	27,900	21,600	31,900	24,300	35,900	27,000	39,900
Major	2 Lanes	6,500	9,600	7,500	11,200	8,600	12,800	9,700	14,400	10,800	16,000
Major	4 Lanes	12,900	19,200	15,100	22,300	17,200	25,500	19,400	28,700	21,600	31,900
Collector	- -	4,600	7,100	5,400	8,200	6,200	9,400	6,900	10,600	7,700	11,800

The roadway capacities listed above are "rule of thumb" figures only. Some factors which affect these capacities are intersections (numbers and configuration), degrees of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, level of truck and bus traffic and level of pedestrian and bicycle traffic.

ASSOCIATED TRANSPORTATION ENGINEERS
100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 • (805) 687-4418

PARKLINK SHUTTLE SERVICE AREA MAP



Source: National Park Service

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Santa Monica Mountains Conservancy/Mountains Recreation & Conservation Authority
Public Works Plan

ParkLINK Shuttle Service Area

FIGURE 7